ABSTRACT

AIMS AND OBJECTIVES:

To compare the clinical stroke scores, ASS(Allen Stroke Score) and SSS (Siriraj Stroke Score) with CT Brain and to assess their validity and predictive accuracy in differentiating acute Intracerebral haemorrhage (ICH) and Infarction.

METHODOLOGY:

This Unicentric Prospective Observational study was conducted at MGMGH, attached to KAP Viswanatham Govt Medical College, Tiruchirappalli from January 2015 to August 2015. Study included 100 patients of Acute haemorrhagic/ischemic stroke (IS), confirmed on CT Brain, after clinical evaluation. ASS and SSS were calculated for each patient and compared with the results of CT Brain for their comparability (kappa statistics) and validity and predictive accuracy by using SPSS software.

RESULTS:

Out of 100 patients, 67 had Ischemic stroke and 33 had Intracerebral haemorrhage. The overall comparability of ASS and SSS was fair (kappa=0.551). ASS and SSS were uncertain in 30 and 21 cases respectively, with kappa showing poor comparability in terms of certain

results (k=0.349). In 62 cases with both scores in the diagnostic range, the kappa showing excellent comparability (k=0.916). The Sensitivity, Specificity, Positive predictive value (PPV) and Negative predictive value(NPV) of ASS was 39.39%, 94%, 76.47% and 75.9% respectively for ICH and 67.16%, 75.75%, 84.9% and 53.19% respectively for IS, with the overall predictive accuracy of 58%. The Sensitivity, Specificity, PPV and NPV of SSS was 60.6%, 95.5%, 86.9% and 83.1% respectively for ICH and 76.1%, 84.84%, 91% and 63.63% respectively for IS, with the overall predictive accuracy of 71%.

CONCLUSION:

Both ASS and SSS lack sufficient validity to be used to conclusively exclude ICH, before initiating antithrombotic/thrombolytic therapy.

KEYWORDS:

Stroke, Intracerebral haemorrhage, Ischemic infarction, Allen Stroke Score, Siriraj Stroke Score.